



112766-199.ST25

SEQUENCE LISTING

<110> Short, Jay M.
Djavakhishvili, Tsotne David
Frey, Gerhard Johann

<120> Exonuclease-Mediated Nucleic Acid Reassembly in Directed Evolution

<130> 112766.199

<140> US 10/029,221

<141> 2001-12-21

<150> US 60/008,311

<151> 1995-12-07

<150> US 60/008,316

<151> 1995-12-07

<160> 12

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> defined sequence kernel

<221> misc_feature

<222> 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20, 22, 23,
25, 26, 28, 29

<223> ~~n = A,T,C or G~~

<400> 1

nnknnknnkn nknnknnknn knnknnknnk

30

<210> 2

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> defined sequence kernel

<221> misc_feature

<222> 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20, 22, 23,
25, 26, 28, 29

<223> n = A,T,C or G

<400> 2

nnnnnnnnnnn nnnnnnnnnnn mnnnnnnnnnn

30

<210> 3

<211> 5

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<212> PRT
 <213> Artificial Sequence

<220>
 <223> spacer peptide sequence of any number

<400> 3
 Gly Gly Gly Gly Ser
 1 5

<210> 4
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> linker peptide sequence

<400> 4
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10 15

<210> 5
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 5
 aagggaggag

10

<210> 6
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> forward primer

<221> misc_feature
 <222> 24
 <223> n = A,T,C or G from 10 to 100

<400> 6
 ctagaagaga ggagaaaacc atgn

24

<210> 7
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> reverse primer

<221> misc_feature
 <222> 22
 <223> n = A,T,C or G from 10 to 100

<400> 7
 gatcaaaggc ggcctgcag gn

22

<210> 8
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> forward primer

<400> 8
 ctagaaggga ggagaaaacc atg

23

<210> 9
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> reverse primer

<400> 9
 gatcaaaggc ggcctgcag g

21

<210> 10
 <211> 43
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> primer

<221> VARIANT
 <222> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16,
 17, 18, 19, 20, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33,
 34, 35, 36, 37, 38, 39, 40, 41, 42, 43
 <223> Xaa = Any Amino Acid

<221> VARIANT
 <222> 23
 <223> Xaa = Gly or Thr

<400> 10
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Asn Asn Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40

<210> 11
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer

<400> 11
ctagaaggga ggagaattac atgaagcggc ttttagccc

39

<210> 12
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer

<400> 12
agctaagggt caaggccgca cccgagg

27